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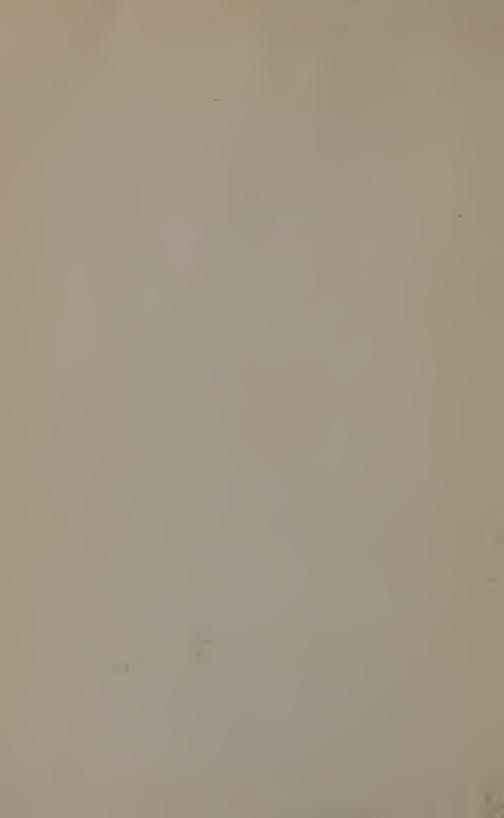
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## Smiths of a Better Quality



# Smiths of a Better Quality

By George G. Nasmith



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#### Preface

T may be truthfully said that practically all of the experiences quoted in this book have come under the writer's personal ob-

servation. For that reason it may be called "A true story."

The manuscript has been corrected by Dr. Ruggles George, Director of Information of the Canadian Red Cross Society; Miss Jean Browne, Director of the Junior Red Cross of Canada; Dr. Duncan Graham, Professor of Medicine, University of Toronto; and Dr. Peter Sandiford, Associate Professor of Education, College of Education, Toronto. To all of these the writer is indebted for numerous suggestions and corrections.

To the adult who would like to delve more deeply into the subject of health the writer would recommend the very interesting book "The Common Sense of Health,"

by Dr. Rinehart published by George H. Doran Co., New York; to those who wish a standard work on the care of the baby, "The Care and Feeding of Children," by Holt, published by Appleton & Co.; and to those interested in the health education of school children, the literature of the Canadian Junior Red Cross, which may be obtained free from any of the Provincial Divisions of the Canadian Red Cross Society.

G.G.N.

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#### Chapter I

HE house numbered 83 Oak Lane seemed at first glance to differ little from the other brick houses on Oak Lane. It had three stories, was constructed of good quality brick, and had the usual number of windows; like most of the other houses in that block.

But the two old maiden ladies who sat a great deal at the windows opposite, reading, noticed that the couples strolling along Oak Lane allowed their roving glances to rest longer than usual on number 83. Possibly it was the band of windows with leaded panes right across the front, which gave it that homey air that only old-fashioned leaded panes can give. Maybe it was the filmy, blue curtains that only partially screened the interior, or the green things growing on the broad ledge between the cur-

tains and the glass. Perhaps it was the fact that the woodwork was painted a warm, rich brown, in tone with the brick, unlike the other houses which were picked out in staring white.

Maybe it was one or several of these reasons that made number 83 Oak Lane stand apart as a house whose owners had personality. Since houses often do reflect the personality of their owners the strollers may have thought,—"The people who live here are different; they are probably interesting, for they do not do as all the others do. It is quite evident that they have ideas of their own and have had the courage to carry them out. They must have individuality."

Number 83 Oak Lane had been very quiet indeed for the two weeks before this story opened; abnormally quiet. Occasionally the two old ladies in the house opposite saw the white-capped maid open the front door to pick up the paper or sweep the steps. Regularly about 8.30 in the morning the young head of the house might have been seen leaving for work, and very irregu-

larly returning home at any time between 9.30 and 11 p.m.

Indeed for two nights he did not return at all and when he came home early in the morning for breakfast there were dark rings under his eyes as though he had been sitting up all night watching. But on this particular morning there was evidence of remarkable activity at 83 Oak Lane. The steps were both swept and scrubbed; the windows were polished; the rooms were aired, and there was an atmosphere about the place as though visitors were expected.

When the owner was leaving for his work that morning at the usual hour the maid came to the door and called after him.

"About three o'clock," he answered, and strode off down the street whistling merrily. The two old ladies at the window across the way looked at one another and smiled knowingly. "She must be coming home to-day," one of them said.

"Yes, it looks like it," replied the other, "Well I am glad; they are such nice young people."

About half past three that afternoon a big limousine drew up at 83 Oak Lane. The young husband proudly assisted his wife and a nurse out of the car, tipped the driver and opened the front gate.

"Shall I take her, nurse?" he asked, almost apologetically, looking at a small bundle in the nurse's arms. His relief was so obvious when the latter shook her head that with difficulty his wife suppressed a smile.

"How do you like that?" he asked, throwing open the door which led from the living room to a verandah overlooking the garden.

"Isn't it beautiful!" exclaimed his wife as her eyes wandered from the sheafs of tall, stately, blue Larkspurs, to masses of old-fashioned crimson and salmon Sweet-Williams, trusses of white and blue Harebells, spikes of pink Foxgloves scattered everywhere, and splashes of golden Gaillardias and other brilliant flowers in the perennial border.

"It's a picture, John," she exclaimed,

looking with happy eyes at the lovely garden, which had become a riot of colour since she had left it two weeks before to go into the hospital. "I am so glad to be home again."

"It is great to have you back," he said, taking her hand in his, "I can hardly realize that the family has arrived without mishap. It was a worrying time for me too."

"Never mind," said his wife, "It's all over now." At that moment there came a whimper from the bundle in the nurse's arms. "We will show you the way to the nursery," said the young mother. "Come on, John," and with that inordinately vain air that only a young couple with their first baby can assume, they preceded the nurse to the room which they had fitted out with such loving care and thought some months before.

The practiced eye of the nurse observed that the walls and fixtures were enamelled, that the windows were carefully screened, that a weighing scale stood on the table by

the baby's bed and that the floors were well painted.

"Very sanitary," she commented as she

deposited her tiny burden on the bed.

Two years before, when Mary Moore had been a school teacher, John Smith had induced her to join the large family of Smith. He was a young business man with a fair income and good prospects. When it came to the question of staying at home or going to the hospital to have her baby, Mary, after consultation with the doctor, decided on the hospital.

"It will be better for you with the first baby because of the educational advantages of the hospital," said the doctor, who had visited her regularly for the previous six months. "You will see how the nurses handle your baby, what they do, and equally important, what they don't do."

So she went to the hospital, and when she returned, the expert baby nurse came with her for a week, on the strong recommend-

ation of the matron of the hospital, who had taken a particular interest in the case. "You

will thank me later for my advice," she assured them.

On the first evening, about an hour after the baby had been fed, she began to cry and at the opening wail the mother rose to her feet.

"Just remain where you are," said the nurse, "that is not a cry of pain; baby is only going to take some exercise." The mother reluctantly consented and the crying kept up for half an hour, though at frequent intervals the mother pleaded with the nurse to pick her up.

"You must be patient and start right," said the nurse. "If you begin to take her up now you will have to do it every night for the next year. The training of the baby must begin the day it is born. This treatment is best for the baby and for you too," she said kindly.

"It does seem rather cruel," observed John, who strongly sympathised with his wife.

"That is because you are assuming that crying is always a symptom of pain. It

isn't," she said, with an air of finality. "When she cries from pain you will easily distinguish the difference, and even then the chances are three to one that it will be only wind on her stomach and easily cured."

The Smiths were forced to content themselves with the situation, and when the week had elapsed they were exceedingly grateful to the nurse for having insisted on having her own way. They had learned that a certain cry meant stomach pain, and that putting the baby stomach down over the shoulder for a minute or two would expel the gas and stop the screaming. They had also discovered that the baby would lie awake in her cradle perfectly happy without the slightest attention. Mrs. Smith learned to prepare the auxiliary food which had proved to be necessary to feed the baby in her case. She discovered that a baby learned good habits just as rapidly as bad ones, and that these were almost as difficult to break once they had been formed.

The nurse had been firm and had ruled father, mother and baby with the same iron

hand. The Smiths realized the value of the training, and when the nurse went away, kept up the routine until the good habits begun had become firmly established. Many a time when they saw their friends compelled to dandle their babies, or take them out walking or motoring to prevent them from disturbing the neighborhood, the Smiths congratulated themselves upon their own good sense in allowing the expert nurse to have her way.

During the first few months the baby was treated exactly like a little animal, fed by the clock, kept immaculately clean, well housed, and left alone most of the time. For a few minutes only each evening they played with the baby, a relaxation which both enjoyed very much. The baby soon learned to know when the hour had come, and expected to be picked up.

Of course the parents had their frights. On occasion the baby would take a violent fit of crying in the night and in alarm they would call up the doctor, who usually, after asking a few pertinent questions, advised

a drink of water, an enema, the removal of excess clothing or some other simple but effective remedy. They were amazed to find that the baby could become blue with cold without minding it, but that it would go into paroxysms of rage and protest if it became overheated. The soothing effect of a drink of water was sometimes quite remarkable and the expulsion of accumulated wind on the stomach almost invariably resulted in a sudden calm after a great squall.

The baby grew according to Holt. It was weighed weekly, and the increase of weight, according to the standard table of weights, was a satisfactory sign of development. The life of Margaret Smith was a life of routine in which baths, regular meals and sleep alternated with mechanical precision, and the baby responded to the treatment and grew like a healthy well-cared for plant.

#### Chapter II

HE first year of baby Smith's life was comparatively uneventful. To her parents the signs of dawning intelligence were amazing.

They were delighted when they discovered that their child had a different smile of recognition for each of them. They wondered to see their baby gravely studying the faces of the few relatives who were permitted to see her. They marvelled when they found that they could set the clock by the baby's demand for her meals.

During that year the baby spent all her sleeping and waking hours in the open air, protected from direct sunlight, rain, snow and winds. Often they found her with her hands blue with cold, but to their surprise she never caught cold.

"What hardy little beggars they are," observed the father one morning to the doctor

who was making his monthly visit to see that all was going well.

"Cold by itself never causes one to catch cold," said the doctor. "Your baby has to get the germs that cause colds before she can develop a cold. So don't go near her when you have a cold, and don't let anybody else who has one. Treat such people exactly the same as if they had the plague. If anybody insists on kissing the baby, which is a most unnecessary and unsanitary custom, let them kiss her on the cheek, or better still on the neck. Young nursing babies often seem to have a natural immunity to certain communicable diseases. If reasonably protected they seldom catch anything during the first year of life. The great thing is to feed them exactly according to directions, keep their alimentary systems in good running order and observe the simple hygienic rules as to cleanliness, clothing, fresh air and sleep."

"They are treated just like little animals, aren't they?" asked John.

"Exactly," said the doctor, "and like

them they respond to good care. On the other hand it is possible to wreck a baby for life with a few weeks' careless treatment. Lack of proper care, and resulting indigestion, may seriously mar the physical development of the child, and may even produce mental characteristics which can only be got rid of with the greatest difficulty."

"But do you treat them all alike?" asked

John.

"In general terms, yes," replied the doctor, "But in practice there are variations. For instance your neighbor Parker's baby down the street could not assimilate modified cow's milk as your baby could and I had to put her on buttermilk."

"Buttermilk!" ejaculated John.

"Yes, buttermilk," he replied. "She went ahead like a house afire on it."

"How extraordinary!" exclaimed John.

"Another baby not a block from here could not digest either modified cow's milk or buttermilk but thrived on 'butter soup' which is made of milk, sugar, butter and flour."

"Why, they seem to have natural likes and dislikes the same as grown folks," said John.

"They certainly do," acquiesced the doctor. "Though most of them do well on modified cow's milk, something in the make-up of the odd baby refuses certain foods, and then we have to find one that agrees with it and yet contains all the essentials for proper growth. Every diet must supply them with lime and other necessary salts to make bones and teeth; proteins to build muscle; fats and sugar to give energy and vitamins to make them grow."

"Vitamins! what are they?"

"Vitamins are very small, but vital, elements found in foods and are absolutely essential for growth and health. Without them growth will not take place. There are several varieties of vitamins. Fresh milk contains most of the vitamins necessary for young babies, as well as actual food constituents; though now it is the general practice to give the baby some orange juice or

strained tomato juice daily. But as the child grows older he will need the vitamins from fruits and leafy vegetables such as lettuce and spinach, as well as a greater variety in food. If you follow the diet of your baby closely, you will learn a great deal about foods and diet during the next two years. Well I must be going; good morning," and with a wave of his hand the doctor drove off.

Mrs. Smith, through her interest in the food and hygienic living of her baby, began to become quite an expert on diet and matters of health. She spent much more of her time in the open air, and at home she found herself, almost unconsciously eliminating some of the customary things from their former diet. Brown bread and bran muffins made their appearance on the table. Whole wheat partly replaced white flour products. Fresh vegetables and salads were on the menu at least once a day. Stewed and fresh fruit began to displace pies. Nuts, raisins, figs and dates were found to be an agreeable substitute for the

after-dinner candy. Veal, which she had discovered to be poisonous to her husband, and young lamb, which did not agree with her, disappeared from their table for good; while the proper cooking of vegetables received the attention which it deserved.

John noted these changes, and soon realized that no meals were as good as those he had at home, or agreed with him so well. What he did not realize at first was that he was now getting well balanced meals, that contained adequate amounts of the different kinds of food stuffs, and that the abnormal fermentations, created by too much of one or other variety of food and producing intestinal poisoning, from which he had sometimes suffered, had ceased. As Carlyle said, "The well know not that they are well, only the sick."

Margaret was now fifteen months old, a sturdy little girl, running about, talking a little, interested in everything and eating quantities of food astonishing to behold. The doctor had been insistent that she should get small amounts of all the whole-

some foods in order to develop a taste for them.

"Children often refuse to eat wholesome foods like vegetables because their parents have catered too much to their likes and dislikes," said the doctor one day as he watched the youngster attacking a large plate of mixed vegetables, egg and potato at her dinner hour. "You can accustom almost any child to any food if you use a little discretion," he continued. "It makes me tired to hear parents say, "My child simply won't eat vegetables," and then call me in because their child is not well nourished or is suffering from constipation, or not developing properly. If children are given plenty of vegetables with their other food they will not be constipated, and the chances are that they will develop normally in every way. It is usually the fault of the parents if children are not developing normally, because they, and they only, can start them on the right path as far as diet and nutrition are concerned."

About this time the first "accident" happened to Margaret. The Smith's maid had been ill with a had cold and had been carefully isolated in the attic for several days. Then the Smiths had to leave on a short visit, or thought they had, and the child was left in charge of the maid, who was supposed to be completely recovered. The night after the Smiths returned, Mrs. Smith noticed a peculiar bright look in the child's eye, and later discovered her in a raging fever. She found that the baby had a temperature of 104 degrees and a very rapid pulse. The doctor came and found it to be a case of tonsilitis. For a week Margaret suffered from the effects of the attack, and when it had passed it was found that her tonsils had become quite enlarged. When she did not pick up as she should have done in the course of the next month, the tonsils were removed; and the health of the child rapidly became normal when these diseased appendages had ceased manufacturing poisons.

"How do you suppose our baby caught

that disease?" asked John during the course of one of the doctor's visits.

"I should say from the maid," replied the doctor. "Evidently she was still infective and must have been giving off virulent germs. These nose and throat troubles are the consequences of germ infections. You have to get the germ before you can 'catch a cold' or tonsilitis, or pneumonia or any of the rest of them."

How truly the doctor spoke, the Smith family found to its sorrow. The result of a little carelessness on their part temporarily wrecked the whole household, for in rapid succession Mrs. Smith and John came down with colds which they had contracted from their own baby. In John's case it took the acute intestinal form. In Mrs. Smith it developed through the ordinary stages into a miserable attack of bronchitis. But why go into harrowing details? Everybody has had the wretched experience in one or both forms, and we will let it go at that.

#### Chapter III

HE bringing up of the Smith baby and the methods employed evoked widely varying opinions from friends and relatives. One

grandmother was highly incensed because she was not allowed to pick up the baby and rock her whenever she wanted to.

"It makes 'em sea-sick," said John, much to that grandmother's disgust.

The grandfather said little but strongly approved of the new methods.

"It's positively cruel," said one young mother, who knew it all: "I have to pet my baby all the time; I do not see how you can do without it." That young mother's husband said nothing, but he had visions of the nights he had walked the floor with the baby while his friend John was slumbering peacefully.

"Is she always like that?" asked another young matron as she peered into the car-

riage where Margaret, clothed in a light shirt and diaper, lay cooing contentedly and trying to get a big toe into her mouth.

"Nearly always" replied Mrs. Smith. "I do not believe she has cried for a week."

"Isn't that wonderful? was the awestricken reply. "I never heard of such a thing in my life."

As a whole opinion was favorable to the new practice. Some approved of and tried one thing; some accepted others. Scientific management of babies in the Smith circle was generally considered to be rather successful, if apparently inhuman to a few. Why it should be thought cruel to leave a baby kicking and cooing happily in a comfortable dress is rather difficult to fathom; but old beliefs die hard. At any rate Dr. Webster's practice grew steadily.

At the dinner table one night John Smith was unusually pre-occupied.

"What is the matter John? had a hard day in the office?" inquired his wife.

"No, it isn't anything to do with the office; but there was a chap in the office to-

day from the north country and he got talking about his family. He told me that they
did not have a doctor within thirty miles of
where he lived, and that his wife on two occasions had had children before the doctor
could be summoned. Isn't that terrible?"
he added.

"That is happening all over Canada in the unorganized territories," said his wife. "I was reading an article just the other day in which it was stated that four thousand children were born in one Canadian province last year without the attention of either doctor or nurse."

"It seems to me to be a dreadful reflection upon our civilization," said John.

"The article went on to say that various organizations, notably the Red Cross, were trying to solve the problem by establishing small outpost hospitals in unorganized districts so that people could go there when sick and obtain proper treatment. Thirty of these outpost hospitals have been established in Canada under the care of trained nurses and operated by the Red Cross

Society. In a few years it is hoped that Canada will be well covered by these little "outpost hospitals." It seems to be mostly a question of organization and co-operation rather than the expenditure of large sums of money, since they have proved to be largely self-supporting."

"Well I hope that outpost hospitals will continue to multiply until the country is well served," said John; and then added thoughtfully, "People who live in the large centres really do not appreciate the value of services like those of the medical profession, hospitals, clinics, health departments and other blessings at their very doors. Just think of what it would be like in the north country to have our baby sick and not be able to get the doctor! Just think of going through all your experience and the expense of it, though that is a small matter in comparison, and then losing the child after all, for lack of skilled assistance. And yet people will run the chance of losing their children through reluctance to spend a few dollars on the doctor right in our city.

Children are lost every day, they tell me, just from this reason. It seems like mighty poor business to me."

As Margaret grew older the mother began to notice many interesting things about her baby girl. She discovered after the first two or three teeth had come through, that a period of irritability and feverishness was the forerunner of another tooth, and that the mental effect was due to a physical cause. She also found that irregularity in diet or failure to perform some health habit had a marked effect on the child's disposition. So that when Margaret was obviously cranky or unusually quiet she began to look for the physical cause. The mother was beginning to discover the soundness of the statement that mind and body cannot be dissociated.

John, pottering about his garden, was very struck with the love which the little girl was developing for the garden and for flowers. He found it easy to train her not to touch these growing things, and he noted that one tiny bloom would please her as

much as an armful. She tried to imitate her father by digging and raking with sticks as tools; and, to encourage her, he bought her a set of baby garden tools which pleased her immensely. After that she undertook to dig and rake and hoe like a professional in the little corner of the garden which her father had given her for her very own.

About the end of the second year the neighboring children began to come around to play with Margaret, and what was feared might happen actually did happen. Once more she developed a high fever, and upon examination of her throat her mother noticed the presence of a whitish membrane. The doctor came at once, pronounced it to be diphtheria, and gave her ten thousand units of anti-toxin. By night the membrane had disappeared and the fever had subsided. In two weeks Margaret was out in the yard playing once more.

The child from whom she had contracted the disease was not attended by the doctor until the third day after he had been taken ill, and eighty thousand units of anti-toxin

failed to neutralize the diphtheria poison. The damage done to the body proved irreparable and the boy died. The Smiths were glad that they had taken no chances and had called in the doctor at the first symptoms. The hospital training and the willingness to follow scientific instruction were beginning to count.

There was one unfortunate sequel to the attack of diphtheria, in that Margaret became thoroughly spoiled. Her parents had started off with common sense ideas about bringing up children and, like most people, loathed the presence of an irritable, perverse or spoiled child. Their own baby, like many other babies at that age, was precocious. She was with her parents a good deal of the time and her attractive manners and cute sayings naturally caused much amusement among visitors. As soon as Margaret discovered that she had an audience she became self-conscious and artificial, endeavoring to attract attention by every possible means. If she did not succeed by the usual methods she found that she

could always make a scene, and attract attention by being disobedient or ill-tempered; and, much to the dismay of her parents, they were finally compelled to admit to each other that their first-born was just as naughty and spoiled a child as they had ever seen.

However they were conscientious and set about trying to find ways and means of "unspoiling" their child. They read Montessori; they studied Froebel; they waded through Freud, and then came to the conclusion that the raising of a child, as it ought to be raised, from the mental, moral and spiritual standpoints, was about the biggest problem of mankind. Of course they learned from books a great deal about the working of a child's mind, and they unearthed many useful principles in child psychology which they were able to employ with advantage. In the end, however, like most parents, they had to evolve a method of training which was best suited for their own child.

They did not find that explanation, dis-

cussion and argument were always the most effective means of achieving results, but that a good spanking now and then was very efficacious in bringing the youngster back to her bearings, particularly for disobedience. We must leave them here with the knowledge that Margaret, in the course of a few months became a sweet, obedient child once more.

# Chapter IV

NE night John's father came over to supper and the conversation turned on the subject of heredity. Mr. Smith senior was quite posi-

tive about some things and one of his favorite themes was the relative importance of environment and heredity.

"Don't get him started on that," John had warned his wife. "Once upon a time he read a book on it and he has never forgotten the contents, which were disproved many years ago. Dad is a fine old gentleman, but on things that he thinks he knows about he is inclined to be positive."

How they happened to light upon this taboo subject John and his wife could not recollect, but suddenly they found themselves hopelessly involved.

"A very interesting subject," said Smith senior portentously. "I have never been able to decide which is more important in

life, environment or heredity. I used to think that heredity was the more important, but from what I have seen lately I am inclined to believe that environment outweighs it."

"For instance?" said John, realizing that

it was too late to stop the discussion.

"Well," answered Smith senior, "I used to have a temper; I was born with it. . . ."

"Yes, I know," said John drily, "I inherited it too."

Smith senior glowered at John over his glasses and continued, "But I find that constant training has enabled me to control it completely under all circumstances."

"Interesting if true," retorted John, "but I don't believe it. Your grandfather had that temper; so had your father; so have I; so has our baby. We have all learned to govern it to a greater or less extent, but the Smith temper has been transmitted from our ancestors for a hundred years and will continue to be transmitted, unless by chance selection it becomes more or less suppressed."

Smith senior was somewhat annoyed, but in view of what he had just said, kept his temper and continued, "I don't think so; I do not believe that my temper is as bad as was my father's."

"How about mine?" queried John.

"Well," hesitated Smith senior, "there was your mother, you know."

Smith senior was silent for a moment and then continued doggedly, "Why, look at the horticulturists who are constantly raising new species of plants which do not resemble their parents in the faintest degree."

John almost rose from his feet as he realized that his father had unwittingly played into his hands.

"Yes, he said quietly, "take the horticulturist; let us see what he has done. Take the example of the 'Four-o-clock,' a flower of which there is a red and a white variety. If he crosses the red and white varieties he gets all pink seedlings. Pink, as you know, is really a mixture of red and white. He does not get yellow, blue, orange, scarlet or any other colour. The seeds from the new

pink seedlings will produce one fourth red seedlings, one fourth white seedlings and one half pink seedlings."

"Well," said the father, "what does that show?"

"It shows," replied John, "that you never can get out of those red and white plants what was not there to start with, and no matter how you cross breed you can only get your original colours and their combinations."

"But because you do that with some fool plants it doesn't necessarily follow that the same thing happens in the animal kingdom. It doesn't prove either that if your red and white plants were living under certain conditions that they would not develop a blue or some other colour," asserted Mr. Smith.

"Well, it has never happened, that's all, replied John. "Plant breeders have raised millions of seedlings and they have never yet obtained in the seedlings anything that was absent from their ancestors. That is how new varieties are developed," said

John. "The plant breeder selects original stocks, possessing the qualities nearest to those he desires to reproduce in his new plants, and crosses them. As the result of thousands of experiments he may find one or two which have a great many of the qualities which he desires. He crosses again, hoping finally to obtain one with all the qualities which he is after. But it is all carefully considered, scientific selection of qualities which already exist in the plant. They never, never, develop qualities which their ancestors did not possess," finished John triumphantly.

"Well," said his father grudgingly," that may be true in the case of flowers, but I do not believe it is true with animals or human beings."

"Exactly the same thing holds good in the animal world," answered John, who had just been reading a book on environment and heredity and was now fairly wound up. "Blue Andalusian fowl are obtained by crossing black and white fowl. By breeding the blues together you get one quarter

white chicks, one quarter blacks and one half blues.

"You never get browns or anything that did not exist in the parent stock. It is the same everywhere you look. You never get a race horse from breeding ordinary farm horses. Nor do you ever get a Clydesdale from racing stock. You can only get in the progeny what was in the ancestors.

"What is even more interesting and important is that you can get rid of undesirable qualities in your animals only by careful selection of parents which have a preponderance of desirable qualities. Are you answered?" he asked his father, who was silent. "You know it's true, Dad, and, since it is true, it shows that we cannot introduce new elements of brain or muscle except through selection. 'Like father like son' is absolutely true, though it is possible to suppress undesirable qualities in children and to develop desirable ones by training."

Smith senior was turning the idea over in his mind. "Then if that is true," he said, "the end of the world is in sight."

"What do you mean?" asked John with surprised interest.

"Why it simply means this," replied the father; "It is a fact that those who have the largest families in every country in the world are those who have the lowest mental and physical qualities. The more intelligent the people the fewer the children they have. What is going to be the result? The mental defectives are going to overcome the intelligent ones of the earth by sheer force of numbers. They will eventually submerge them. Why, it is damnable!" he cried out in a sudden paroxysm of wrath. "The discoveries in scientific medicine and public health are going to prove to be boomerangs. Public health measures are now saving the unfit, where they used to die through ignorance and neglect. Public health measures are doing comparatively little for the intelligent because they have always been able to look after their own. The result will be a tremendous overgrowth of those who are unfit to propagate their

kind, unless some means are found to prevent them."

"You are right," said John, "A few thinkers have awakened to the importance of the problem and the dangers looming ahead for the world at large. I suppose that when the public conscience is once aroused action will be taken to cope with the situation."

"It seems tragic that all our attempts to improve ourselves and the race by our own individual efforts are to be useless," observed Smith senior sadly.

"They are not useless," replied John, "far from it. Nobody ever gets anywhere without a struggle. It is necessary for us to strive to overcome, if we are to make individual progress and if we are to inculcate true ideals in our children. It is our idealism, and the influence of our character that we leave behind us, that makes the world a better place to live in. These, as well as our hereditary qualities, are things that we can pass on to our children. The facts of heredity are not really so disturbing as they

may, at first sight, appear to be. But they do show whither we are heading and indicate the dangers that lie ahead. When we know the danger we can avoid it. When people understand, they will not mate with morons, imbeciles or mental defectives—and will not be allowed to. The latter will be prevented from breeding by the employment of simple painless methods of sterilization, and intelligent people will realize that they have a duty to perform to themselves and society by raising at least four children instead of one or two as at present.

"What we need is the development of public opinion on the subject. When public opinion is aroused action will follow. The thing necessary is to arouse public opinion and that takes time."

"Well," said Smith senior as he rose and took up his coat and hat, "You have given me a lot to think about. I expect that you are right, but I confess that I am bitterly disappointed that acquired characteristics cannot be transmitted to our children. However we must face the situation, and do

all that we can to stress the importance of environment, and try to make it as perfect as possible. I suppose that will be the most effective way of keeping the little savages who are born with age-long proclivities from reverting to their ancestral tendencies. The training of children with this in mind is going to be a solemn obligation. Well, good night, John."

"Good night, Father."

"Poor old Dad; he got a bad blow tonight when his old theories about acquired characteristics being transmitted were proved false."

"There are doubtless thousands of intelligent people who have the same wrong idea," said his wife as she locked the front door.

"I suppose so," said John snapping off the porch light.

# Chapter V

HEN Margaret Smith was nine years old and her brother Jack was seven, their mother contracted influenza. For years she

had been a most remarkably healthy woman, had followed systematically the hygienic laws of living, and had escaped nearly all the ills that ordinary flesh is heir to. The attack was a bad one and left Mrs. Smith with a weak heart and moderately jaundiced. As she recovered very slowly the doctor thought her case serious enough one to prescribe a drastic change of environment.

"You must get her out into the country for a year," he told her husband. "She is not rallying as I should like. Change of scene and occupation, with plenty of fresh air and sunshine may do the trick, and," he paused, "I would not delay too long."

"Doesn't it seem queer to you that a woman like my wife, who has always been so healthy, should be so completely knocked out as she has been?" asked John. "I thought that vigor of body and hygienic living protected you from diseases like that."

"They undoubtedly do help to throw off minor ailments and infections," said the doctor. "For instance we all must frequently take in germs of tuberculosis, but if we are in good health we do not develop tuberculosis. It is only when we get an overpowering dose, or oft-repeated doses of tuberculosis germs, that we contract tuberculosis. People who are not healthy will contract the disease much more readily. Undoubtedly rugged people fail to contract colds when less rugged people do, and probably when they do contract diseases they recover more quickly and more completely because their tissues and organs are in good condition. But," continued the doctor, "it is unfortunately true that the most vigorous people in the world are unable to withstand influenza, typhoid fever, and many other

communicable diseases unless they happen to have a special immunity to such diseases. Good health alone will not save them from the attacks of such germs, if enough are taken in by the body."

"Then if good health does not give one immunity how can one obtain it?" asked John.

"In the case of typhoid fever, if you were to become inoculated with dead typhoid germs, immunity against typhoid fever would develop in your body, and would possibly last for several years."

"I remember," said John, "we were given the anti-typhoid inoculation in the early days before we went overseas to war."

"Yes, and you drank all sorts of filthy water and ate fly-contaminated food and you never got typhoid fever," said the doctor.

"Never," said John, "It was marvellous. But I did get trench fever."

"Yes, from bites of lice," replied the doctor; "I had it myself. There was no way of obtaining immunity against that disease.

But in the case of small-pox, scarlet fever, or diphtheria, to take examples, we can develop an artificial immunity. Unfortunately in most cases we only develop immunity through an attack of the disease."

"So that is the reason why adults seldom catch scarlet fever, measles, mumps and other children's diseases, is it?" queried John.

"Yes, that is the reason," replied the doctor. "Now your wife had no immunity to influenza, and when she received a sufficiently large dose of influenza germs she developed the disease."

"But where would she get it?" asked John. "None of us have had it and as far as I know we have not had any visitors with colds."

The doctor shrugged his shoulders. "In any one of a thousand places," he replied. "In the street car; at the theatre; in church; while shopping; in an elevator; at an afternoon tea, or from some friend who was still in the early infective stage and yet who showed no symptoms. You never can tell.

The worst of these communicable diseases is that they are most communicable in the early stages often before the infected persons realize that they are sick. That is how the diseases spread and that explains how difficult it is to prevent them from spreading."

"Where do you think I should take my wife, doctor?" asked John.

"Oh twenty miles north of here on the highland would be far enough away to keep her friends from bothering her too much; at the same time it would enable you to come into work without too great a loss of time or a tax on your strength. The sooner you get out the better."

And so it came about that after spending two or three days motoring around investigating various properties, John took his wife out to see a fairly modern farm-house which he could lease for a period of two years. His wife was delighted with it. There was a good garden, and the house was well built though it lacked the conveniences which city people have, and farm

people could have, if they wanted them as much as they do impressive barns.

The view overlooking miles of hill and valley, with a great lake shimmering in the distance was magnificent. The country was well-wooded and evidently fertile, judging by the well kept farms and substantial houses and farm buildings.

"I think I could be quite happy here, John," said Mrs. Smith, and so it was decided. John rented his city house at forty dollars a month more than he paid for the farm house. The road from the city was an excellent one and John was able to get home in three quarters of an hour by trolley and a little less by motor, even in the winter time. The move from the city was quickly made and soon the Smith's were settled in their new home. The owner of the house had granted permission to instal the necessary electric wiring in the house, also a water pressure system and septic tank, and had agreed to pay half of the cost of the installation when the lease expired. All the furniture had been sent out from the city

house, so that the family felt after a few weeks as though they had lived in the house for a long time.

Of course there were problems to solve, one of the most important being the education of the children. After due deliberation it was decided to send the children to the nearest country school instead of to the school in the village down the line. Two or three considerations decided this, the chief one being that the half mile walk to school across country day in and day out would be far better for the health of the voungsters than the daily journeys in crowded suburban cars. Mrs. Smith was of the opinion that the children would probably not make as much progress in the country school as they would have done in the city school, but she did not think that would do them any harm. Before many months had elapsed she was obliged to change her views on several points.

# Chapter VI

HE changes in environment and

the necessity of looking after many alterations, together with her own physical weakness, made it impossible for Mrs. Smith to look as closely after her children's health and habits as she had been accustomed to. The same reasons resulted in Jack and Margaret changing some of their health habits also. They had to get up earlier in the morning in order to walk to school and if they were late they, like many children, sometimes postponed the necessary morning visit to the toilet until they reached school.

Several months later Mrs. Smith had regained most of her strength. Long walks in the country, plenty of fresh air and sunshine, and freedom from many social worries had the desired effect, and her health rapidly returned. Jack and Margaret, on the contrary, slowly went back-

ward in spite of the walks, the fresh air and the sunshine. This fact came home to Mrs. Smith with startling suddenness one day when a chance remark from a relative about the lack of colouring in the children's faces made her look at them with new and critical eyes. At once she realized that they had lost their general appearance of well being.

She then recalled the fact that the children were more irritable than they used to be and far more inclined to quarrel. Margaret frequently complained of head-aches. Jack was always saying that he was tired. They were not hungry and were inclined to be finicky about their food; they wanted to eat what they liked, rather than everything that was set before them as they formerly had done.

Mrs. Smith was shrewd and observant with a penchant for linking up cause and effect. She carefully observed the children at home for a few days. Then she began asking questions about the school and what it was like. The children did not seem to be enthusiastic about the school. They did

not like the teacher. There was no fun. Mrs. Smith decided to look into school conditions herself.

"I expect to call at the school to-day about three o'clock"; she told the children at breakfast one morning.

"What for, mother?" asked Margaret with a decided accent of disapproval.

"For the love of Pete, don't!" urged Jack. "Why?" asked his mother.

"Oh because; it's a rummy old place; you won't like it, and the teacher, . . . . ."

Jack's expression was more eloquent than words.

"Well I am going," said their mother. "Do not say anything about it. I'll just drop in."

Accordingly about half an hour before the school closed that early December afternoon Mrs. Smith "dropped in" and introduced herself to the teacher. Her reception was civil though not cordial. Visitors were a nuisance to Miss Boardman, who had entered the teaching profession a great many years before as a means of making a liveli-

hood, and thoroughly hated her profession. However, she was of the type who once in seemed to lack the necessary 'pep' to get out. She had been 'born an old maid' in the worst sense of the phrase. For years she had been wandering from school to school, never satisfying the authorities and never contented with her lot. She had learned little about children since she had entered the profession. She made no allowance for the fact that children were all different; that they came to her with hereditary traits for which they were not in the slightest degree responsible, or that they were subjected to different home environments, different parental training, and different ideals. It never dawned upon her that every child was an entity, a wonderful mosaic of ancestral characters, a mosaic which training was capable of changing and modifying very greatly. She never dreamed that often the brightness or dullness of her pupils were the direct result of illness or bad health habits.

Her methods were simple in the ex-

treme. She exacted discipline by authority and punished the disobedient. To attempt to make lessons interesting to her children never dawned upon her as something desirable or possible, and she would probably have scouted the idea had it been suggested. Of course she was not a success, nor could she have ever been a success as a teacher, for she did not care for children or for teaching. She knew nothing of child psychology. Her pupils speedily discovered that she had no real interest in them. In retaliation they made her life a burden and did as little as possible of their allotted tasks.

The children looked at the visitor with much interest, for visitors at the school were rare and smartly dressed ladies were still rarer. The pupils regarded her with distinct approval, and when they whispered behind closed palms that the lady was their mother, Jack and Margaret felt that they were being endorsed as they never had been before.

Mrs. Smith introduced herself to the teacher, explained that she had come to see

the place where her children were spending one quarter of their lives and one half of their waking hours. That playful reference gave Miss Boardman a distinct shock. The fact that children spent about half of their waking life in school had somehow escaped her before. That children might be actually growing taller and bigger physically as they sat before her in school was a rather disconcerting idea. Miss Boardman made some casual remark while Mrs. Smith kept on talking, noting all the while many things about the school room. She mentally registered the following facts:—

- 1. That the school was overheated by a stove.
  - 2. That the windows were all shut.
  - 3. That the air was close and stuffy.
- 4. That there were windows on opposite sides of the room, causing cross lights and producing a dazzling effect on the children's eyes, and that there was insufficient window space for the size of the room.
  - 5. That the walls were dark, and that

dark green window blinds shut out about half the light from the windows.

- 6. That the blackboard was shiny, thus making it extremely difficult for the children to see what was written on it.
- 7. That the posture of the children was deplorable. Most of the desks were too high for the younger pupils and this made them sit with hunched up shoulders. Some of the little tots could not place their feet squarely on the floor, because their seats were too high. Several of the bigger boys and girls had to stoop over desks that were much too low, or lounge uncomfortably. It appeared as if the boys and girls must manage to adapt themselves to stationary desks and seats, instead of the desks and seats being adjusted to the needs of the different sized growing boys and girls.
- 8. That an open pail with a common drinking cup beside it contained the supply of drinking water.
- 9. That there were no wash basins, towels or soap in the school.

10. That the floors and desks were dirty.

In her conversation with Miss Boardman, Mrs. Smith also discovered:

- 1. That there was not a playground in connection with the school.
- 2. That the lavatories were outside and very unsanitary.
- 3. That there was no provision for regular janitor service or for keeping the toilets clean.
- 4. That there was no school garden in summer.
- 5. That there was no parent organization connected with the school.
- 6. That school concerts or other school enterprises were never held in connection with the school.
- 7. That nobody had ever suggested the value of a hot school lunch.

Mrs. Smith learned in fact that this was one of the old red school houses that she had "read about in the back of the book." She studied the teacher attentively and felt

greatly relieved when the latter informed her that she expected to leave the school at the end of the term, then just about two weeks off. Mrs. Smith offered up a devout, though silent prayer, that the new teacher would be of a different type, and even as she hoped, she began to make plans to see that her hope would come true,—which is the right way to hope and pray.

# Chapter VII

T the teacher's request, Mrs. Smith gave the children a little talk on the origin of Christmas, a subject with which she hap-

pened to be quite familiar, and which seemed to please the youngsters greatly. This she topped off with the story about the animated Christmas tree, which made an excellent ending to the afternoon.

When school was dismissed, Mrs. Smith went for a walk with her boy and girl and on the way home took a look at the school toilet. She found it worse even than she had been led to believe, and she learned from her children that they never used it if they could possibly help it. The survey of the school premises was now complete and it only remained for Mrs. Smith to think out a solution of the problem and set about rectifying matters.

During the months that she had been under the weather Mrs. Smith, in her search for health, had walked the roads and fields for miles around. During her rambles she had met many of the farmers wives who quite took to this genial and friendly lady. At church she had met most of the others, and with her knowledge of the mothers of school children she felt satisfied that she could start something with a fair assurance of success.

Several of the wives of neighboring farmers had called upon Mrs. Smith and had been agreeably surprised at the obvious naturalness and kindliness of their hostess. They were interested in the changes which had been made to modernize the old farm house and asked many questions concerning them. They viewed with much approval the system in the cellar for supplying the house with water under pressure. In one corner they saw a tank holding three hundred gallons of water connected to a little motor and pump. They were surprised when Mrs. Smith turned on a nearby tap, to

see the little motor and pump suddenly begin to work of their own accord, when the pressure in the tank had fallen below fifteen pounds pressure, and keep on pumping until the pressure had gone up to thirty pounds.

Over in another corner of the cellar they saw another fifty gallon tank with a small electric water heater attached to the side of it. Mrs. Smith explained that the heater worked night and day on a "flat rate" and kept accumulating hot water during the times it was not being used, for the time when it would be needed.

"For a little more than two dollars a month we have all the hot water we can possibly use," she said, "And it is there at any hour of the day or night. Of course the trick is in having the hot water boiler perfectly insulated so that no heat is lost by radiation."

The visitors were also interested in Mrs. Smith's description of how all the household wastes were carried away to an underground septic tank, and were more or less liquefied before they were discharged

through underground tiles under the garden, there to soak away into the soil.

The whole battery of electric stove, electric washing machine, electric ironer, toaster, heating pads, curling irons, vacuum cleaners and heaters had been brought out from the city. Some of the ladies had seen one or more of these labor saving devices and some had seen several, but none had seen so many at once; or such an array of beautiful floor lamps, which made the house glow with rich warm colours. It is to be feared that many farmers were subjected to steady pressure to purchase some one or other labor-saving device or electric comfort from the date of their wives' visit to the Smiths.

After her inspection of the school Mrs. Smith concentrated on the discussion of the subjects of teaching and health, so that by the time it became necessary to engage a new teacher, the salary usually offered had been raised by \$250, with the hope of getting a better one than the last. The germ of a mothers' association in connection with

the school was also sprouting. Nobody knew exactly who had planted the seed, but every mother somehow had been made to feel for the first time that the most important duty in their lives was the thorough education of their children, not only from the mental but from the physical and moral standpoints as well.

When Miss Boardman had disappeared and the holidays had come, the field which the new teacher was to till had been broken up to some extent, and was in a much better condition for cultivation than it had been before the Smiths came upon the scene.

At supper the day after she had been visiting the Smiths' home, Mrs. Cartwright, who had been doing some hard thinking, burst out at supper:—

"Dad, we simply must do something to improve conditions at our school. Our children are not making progress at all; you will have to do something."

"What can I do?" countered her husband, a farmer of rather a far-seeing type and financially well-to-do.

"You are on the school board."

"Yes, but . . . ."

"Well then insist on getting a teacher with ability and training. Don't take the first teacher who applies."

Thomas Cartwright thought for a moment or two and then asked "What about Ellen?"

"Ellen! Oh wouldn't that be splendid. Do you think you could get her?"

"I will try if you approve. She would have to live with us, of course."

"Certainly; she could have the spare bed room. Oh if we could only get cousin Ellen to come it would be wonderful! But I wonder whether she would leave a good position in a city school to come out here to the country."

"You can't tell. Ellen is unusual. She has ideas of her own and she never does what anybody else expects her to. I will see what I can do."

Two nights later the meeting of the school board took place and Mr. Cartwright, who carried a good deal of weight

with the members, received permission to try to get his cousin to accept the position of school teacher now vacant. With what he wrote her we are not particularly concerned, but three days later a reply came back saying that she would accept the position for one year.

That night shortly after supper Jim called to see his fianceé, Ellen Peterson. It was her last evening, because she was to leave on the nine o'clock train to take up her new position. Jim was distinctly aggrieved. Here he was, just two months engaged, and his sweetheart had suddenly decided to leave him and an excellent position in a modern city school, to go to the country and take a one-roomed rural school. He had argued it over and over but without changing her intention. He had never got to the bottom of why she wanted to go; probably he had been too annoved to try to find out. To-night it had dawned upon him that there must a substantial reason for her desiring to do so. Anyway he felt that though he had known her

all his life and was seven years her senior, she had always been in some ways inscrutable.

The letters that had come to him while on active service in France from this young high-school girl had been the frank letters of a comrade. Now he felt that he did not know her at all. In other words Jim was beginning to realize that she was a woman, and, as such, incomprehensible.

"Good evening, Jim," said a sweet voice and Jim, startled from his reverie, sprang to his feet.

"Good evening, Ellen," he said, kissing her upturned face, "How are you?"

"Well; and you?"

"Very lonely," he replied.

"Already? Then it wont make so much difference when I leave after all," she retorted.

"It is the anticipation of your departure," he hastened to explain. "Tell me, Ellen, why do you want to leave a fine modern school with every facility for teaching,

and your friends, and me, to go to a country school to teach?"

"Because," she answered, "I want to have certain experiences before I settle down. I am going on an adventure, just as you did in the war. I have an interesting idea in education and I want to see if I can carry it out all by myself."

"But why not carry it out here?" he asked.

"It would be more difficult and take longer here because there are many other factors entering into it; too much dead weight to push out of the way. Where I am going I shall have a free hand for six months, at least, and if I cannot try out my scheme in that time I never shall be able to. It was for this experiment that I took special work in health teaching, posture and so forth. Now my opportunity has come under especially desirable circumstances."

"But I don't understand what is behind all this. Why are you so keen about it?"

"There have to be path-finders in all walks of life, and in my own little way I am

going to be one. I want to see whether my ideas, properly carried out in a school district, will be able to transform that district from the health standpoint. I am egotistical enough to think that they will succeed."

"Yes, but health is the work of doctors, nurses and public health officials. Why don't you leave the job to them?"

"I don't agree with you. All these forces have been at work for years and the war showed that only two out of three of our young men were physically fit to fight. Medical inspection of school children is revealing countless defective children, and even when these defects are corrected health does not always follow. There must be something else brought into children's lives, in school and in home, if they are to grow up happy, healthy, useful citizens."

"And that is?"

"The practice of good health habits and the right kind of hygienic environment."

Jim laughed immoderately, and then, feeling that he might have gone too far,

pulled himself together and asked, "But my dear Ellen, do you really think that a teacher can bring about a complete reformation in a whole school district?"

"Yes, I do," she replied gravely.

"But how; what can. . . . . how in blazes can you?" he burst forth.

"By appealing to natural instincts and true motives," she replied. "The greatest of all instincts is that of self-preservation. The greatest of all desires is to be happy. There can be no true beauty or happiness without health, or efficiency either. And so, because health is such a basic thing, it is necessary, in order to make people desire it, that they should understand that it lies largely in their own grasp. Only the teacher can impart such knowledge or develop such ideals. It is almost useless to try to educate adults except through their children; but it is not difficult to train children in good health habits, and impart the principles and ideals necessary to make them desire to be healthy, efficient and happy children. It can only be done in the

schools by teachers who have been properly trained in matters of health, and who know how to go about teaching them. Once it has been thoroughly demonstrated in one school it will spread, because, after all, educationists, like the rest of us act on the false assumption that 'seeing is believing.'

"That may be true, but if it is true why don't the school authorities tackle it? They must know whether it can be done or not."

"There you have touched upon the heart of the whole matter. Educational departments are trying to do something. They are making medical inspections of school children to some extent; they are detecting remediable defects, and they are also doing some health teaching through nurses."

"Then why not leave it to them? Why in. . . . . why don't you let them do their work and stick to your job?" Jim demanded, thoroughly irritated.

"Because," she replied sweetly, not paying any attention to his irritation, "their teaching methods do not work. Lecturing children on health topics is only adding

another uninteresting subject to their studies. They forget such lessons when they leave the class room because they do not mean anything in their young lives."

"Well," he said, "go on. How is your method going to succeed when theirs fail? What is the difference between them?"

"The difference is," she answered slowly, "that my way supplies a motive or incentive, and the children will practice health habits when there is a motive or incentive for them doing so. It will not be additional work. On the contrary it will be a health game. And by actually doing things over and over again, because they seem desirable, habits will be developed which will persist for life. Instead of being instruction, applied like a coat of paint, it will be knowledge discovered for themselves by actually 'Doing.' That is the whole thing in a nut shell."

"And you think you can do that?" he asked.

"I am sure of it," she replied. "I am quite positive, because parts of my scheme have

been already worked out in other places. I am going to try to make the thing a real and complete success, because I have had the necessary training that most teachers lack. Very few teachers are trained in the principles of health and how it may be taught, though it is marvellous how quickly they learn the essentials once they become interested. But for the reason that I have deliberately taken this advanced work, I hope that I shall be able to carry on an experiment that will be a complete community experiment."

Jim shrugged his shoulders. "I give up," he said, "I might have known you had had it all doped out. I suppose that there is nothing for me to do but sit around and wait until the great demonstration is over and you are ready to come back."

"You must be patient, Jim," she said gently, laying her hand on his sleeve, realizing that he was feeling very strongly about it. "You know that when I consented to our engagement I stipulated that it would

be two years before we were to be married; didn't I?"

"Yes," he replied reluctantly, "but I did not count upon you leaving me for a large part of that time."

"Nor did I know whether you might not be sent away by your firm the day after I promised to become your wife."

Jim brightened considerably. "That's true," he said, taking her hand, "You made no stipulation about me."

"And Jim," she continued, "if you would look upon it in the other way, that I was enjoying my experiment, and if I knew that you would be interested in it, it would help me tremendously. Besides you can come up and see me some times. There are good train connections and I am sure that my cousin, with whom I am to stay, will be able to put you up over any week-end. I shall be lonely for you, Jim."

To Jim the sun seemed to have burst suddenly through banks of heavy, gray clouds and bathed him with glorious golden rays.

"All right, sweetheart," he said, "I will be interested. In fact I am going to be tremendously interested in the success of your experiment. And about those visits, I only hope that your cousin will like me, for I intend to come up there often."

"That is like the real Jim," she said, squeezing his hand, which sent thrills up and down his spine. "Now I must get ready for the train; I will be down in a minute," and she left the room. A few minutes later she returned, and to Jim she was the smartest thing, in her blue, furtrimmed travelling suit and little toque, that he had ever seen.

At the station, a hundred miles away, Thomas Cartwright sat dozing by the railway station fire, when the train pulled in and Ellen got out.

"Hello Tom," she called out as Thomas came in sight rubbing his eyes. "Here are my checks; how are you?"

Thomas grasped the little hand of his smart girl cousin and kissed her with a good

old-fashioned smack that was hearty, even though unsanitary.

"Give me your bag, and I will get the other things; the sleigh is over there," and in a jiffy Ellen was snuggling in among the blankets and buffalo robes with which the sleigh was amply provided. Ellen was glad she had come. The country looked good to her after the city streets, and she fervently hoped that she would not have to go back on her first impressions. The drive of three miles home in the frosty air was a delight and Ellen enjoyed it greatly. Her welcome at the Cartwrights' was warm and sincere, and everybody seemed glad that she had come.

After supper the Cartwrights told her all about the local conditions and why they had felt constrained to send her the S.O.S. call. Ellen saw that here was to be a real opportunity to make something out of a situation that would be truly worth while.

In turn the Cartwrights found out a good deal about their cousin that they did not know before. They discovered that this

advanced young lady of twenty-three with the good clothes, had taken two special summer courses on child psychology; that she had learned how to make the new mental tests which they had read about; that she had spent a year out of school doing special work in physiology and public health, and had learned how to make the ordinary physical tests in connection with medical inspection of school children.

"What did you do it for?" asked her cousin. "Will you get more pay because you know more?"

"No; but I am interested in my job, and I wanted to know something about the new developments in education which are going to mean so much to the pupils of the coming years. The old-fashioned methods of teaching, where you do not take any more interest in your pupils than to see that their brains are stuffed with uninteresting facts, does not appeal to me in the slightest and is going out. That is not what education consists in. Even as a child I rebelled at that prevailing idea."

"It is a fool idea when you come to think of it, isn't it?" asked Thomas. "Most of us got so crammed full of uninteresting facts, or thought we were, that we were glad when we left a school which did not interest us in the least and proved to be of little use to us in life."

The day after she arrived Miss Peterson wrote to Jim:—

"The journey proved to be uneventful except that on two or three occasions a man tried to engage me in conversation.

"My cousin met me at the station with the cutter and we had a wonderful drive home. I was surprised to find that the snow we had a week ago had not melted here. Tom says it is because it is so much higher and a good deal farther north. The air was so keen and so clean and the dark blue sky seemed to be so thickly sown with stars that I felt that it was another world.

"Cousin Jean and the children gave me a real welcome; they are so happy and their house is so home-like that I am sure that I am going to be happy with them, and, by

the way, they wanted to know all about you, and cousin Tom said,—of his own accord,—that he would like to meet you, and that he hoped you would come up here and visit them over the week-end just as often as you possibly could. Isn't he a dear?"

# Chapter VIII

ISS PETERSON at once made a hit with her new class. She did not attempt to teach lessons in the old way but began by try-

ing to get on friendly terms with her pupils. Most of the first week was devoted to talks about the things in which the children were interested; numberless questions were asked and many were the keen discussions that arose out of them.

The teacher took up the time allotted to geography in asking the pupils about the kind of crops grown on their farms; when the plowing began in spring; when the seeding would be completed and when the harvesting was likely to commence. She asked all sorts of questions about the soil, and her pupils discovered in the discussion that some kinds of crops did better on certain kinds of soil than on others.

It was astonishing, when it was all put

together, what the youngsters knew about dairving and the feeding of stock. They knew how milk was handled and what different prices were received from milk sent to the city, the creamery and the cheese factory. Miss Peterson threw in a good many apparently casual remarks about variations in farming methods in the other parts of the province she had lived in, and held their attention with a fascinating description of how milk was converted into dry milk powder in a factory she had once visited. She also introduced a good many ideas relating to the dairy industry of New Zealand, sheep farming in Australia, and cotton growing in Egypt and the Southern States. When the talk was over the children, though they did not realize it, had had their geographical horizon tremendously widened. They had begun to think in world instead of in local terms. They had started to study geography in a new way, beginning with the things with which they were perfectly familiar.

During the discussion on crops she intro-

duced the subject of parentage, care during the growing period, proper surroundings and good food. She drew from the youngsters themselves the fact that when their fathers wished to grow particularly fine crops they sent for selected seed. Then, before planting, they were most careful to get the fields well fertilized and thoroughly cultivated.

Miss Peterson very briefly drew the parallel between good human and good field crops. She told them that people could not expect to produce good stock if they were not good stock themselves. They could not expect to raise healthy, happy children unless these children were well nourished and carefully tended. She was careful not to overstrain the point because her object was merely to give the children a new idea to think about. Incidentally Miss Peterson was demonstrating the fact that the subject of health could be taught in connection with any other subject, at any time, and under any circumstances, without the children recognizing it as a special subject.

The information so interestingly imparted and so readily absorbed was transmitted to the families around many supper tables that night. The parents were interested, but they wondered about the teaching ability of the new teacher. They had never known their children to tell so much about their lessons before and they had grave doubts whether lessons could really be lessons if they were interesting.

The new teacher did not set the pupils formal tasks in writing, grammar or composition, but, after a lively discussion about the birds in the district, in which all the children eagerly took part, she got them to write a story about the birds they knew. The manuscripts varied tremendously in quality. Some were well written and some were badly written. A few showed quite a marked power of expression; most of them little. The grammar of the majority was very defective and their vocabularies remarkably limited.

Miss Peterson, through such means, was rapidly obtaining a wonderful insight into

their powers of observation and their ability to express themselves correctly. As a direct consequence of that first composition she began reading aloud stories by masters of prose, and had the pupils read them also. She commented on the use of the right word and encouraged the children to use a dictionary when in doubt. She often used phrases from Shakespeare or the Bible to illustrate what she meant, such as, "A sower went forth to sow," showing that not a single word too many was used, and that the simplest and most direct form of expression was usually the best. She also by example showed the class that there was nearly always a word to express the exact shade of meaning desired and that it was ridiculous to apply words such as "nice" to a piece of ribbon, a person, Niagara Falls or a motor car.

The effect of this teaching was quickly noticed at home, and parents were sometimes rather astonished at the use of a word to describe an object accurately instead of some careless, overworked blanket phrase

which would have been formerly used to describe it partially and feebly.

Mrs. Smith was greatly impressed with the reports made by Margaret and John about the new teacher. From their comments she inferred that Miss Peterson must be a person of ideas. After closely questioning the children. Mrs. Smith began to get the drift of the new teacher's methods and decided that she would like to meet the lady and find out more about her at first hand. Accordingly, Mrs. Smith walked to school one afternoon to meet her children and was formally introduced to the teacher. Mrs. Smith was greatly attracted to Miss Peterson and invited her to dinner on the following Sunday. Curiously enough, or perhaps naturally enough, invitations to dinner were beginning to come to the new teacher from many parents who had become desirous of discovering what kind of person she was, whereas her predecessor had scarcely received one invitation during the term that she had been teacher in the school.

On the Sunday following, Miss Peterson

arrived at the Smith home, daintily dressed, and looking anything but the typical school marm. Because she was interested in everything and everybody she was easy to entertain. During the dinner, which went off very happily, Mrs. Smith made a casual reference to the reason that had brought them to the country. "If one has no health one has very little, because everything depends so much upon it."

"I am convinced of that," said Miss Peterson. "During my three years of school teaching I have been staggered by the disastrous results of ill-health among school children, and I have come to the conclusion that health is by far the most important asset of children. From what I have seen and read it seems to be impossible for adults to be healthy if they lacked health in childhood."

"The war proved that clearly enough," observed John with conviction.

"How?" asked his wife, evidently surprised at John's remark.

"Why," replied John, not displeased to air the knowledge of the subject he had

gained from an army medical officer, with whom he frequently dined at the club. "Nearly one-half of all Canadians who tried to enlist, or were conscripted, fell down because on medical examination they were found to be unfit to fight. I guess some of them were glad enough," he added with a touch of bitterness. "Some of them were fit enough to make fortunes while we slogged away in the mud and filth of Flanders."

"Now John," said his wife warningly, "Don't get off on that subject."

"The curious thing about it," continued John, "is that most of the troubles of these rejected men were due to sickness in child-hood. A large number of bad hearts, for example, seem to be due to attacks of diphtheria, rheumatism and other illnesses of childhood. It is said that bad teeth and enlarged tonsils are equally dangerous and result in all sorts of heart troubles unrecognizable at the time."

"I know that to be true from the results of medical inspection of school children," said Miss Peterson. "The reports published

show that about 85 per cent. of the children examined have defects of various sorts. Large numbers have diseased tonsils and adenoids and show evidences of malnutrition."

"I suppose that cases of malnutrition occur only in the cities," remarked Mrs. Smith.

"No," replied John, inwardly astonished at the extent of his own knowledge, "that is the surprising part of it. Teeth, tonsils and adenoids are far better looked after in the cities because doctors and free clinics are more numerous; and, as a result of such means to take care of the poor as well as the rich, the children in the cities seem to be better nourished than the children in the country. Isn't that so?" he asked, turning to Miss Peterson.

"Yes, I believe that to be true," she replied.

"But," said Mrs. Smith, "with all the fresh air and good food they get in the country, one can scarcely believe that to be possible."

"I doubt whether country children get more fresh air or better food than city children," answered Miss Peterson. "In summer all children who are old enough to walk, whether in city or country, are out in the open air most of the time. In the winter the city children are probably out playing just as much as the country children. In the country the children are subjected to unsanitary, ill-ventilated schools, houses with the windows stuffed up in many cases for the duration of the winter, cold lunches at noon and a less well-halanced diet. On the whole I believe that the city child gets a greater variety of food and a better balanced diet than the country child, and that is a most important thing," concluded Miss Peterson.

"They tell me," said John, "that among the children of the rich there is just as much malnutrition as among the children of the poor, because of the very fact that you have just mentioned, that they do not have well balanced diets. They get plenty of food but

not of the proper kind or of the right proportions."

"Well, what are we going to do about it?" asked Mrs. Smith, who always had a problem to solve.

"That is what I have been wondering about for two years," replied Miss Peterson. "I know it can be solved and I believe it must be solved in the school and through the school."

"I wish I knew how to solve it," said Mrs. Smith. "I am a firm believer in health first, because without it one cannot do much of anything and is tremendously handicapped in life. I speak from experience."

"I have not heard of any solution," observed John, lighting a long cigar, and settling himself comfortably in his chair, "but if there is a solution I should like to hear it."

"Well," replied Miss Peterson, "I know that the teaching of good health habits and good citizenship is possible with children, because I have tried it. But there has to be an incentive to make it practicable in all

schools and among all kinds of teachers,—something that will make it seem so desirable that it will almost go of its own accord when the pupils understand about it, and," she paused for a moment to accentuate her point, "I believe that it has been found."

"That's great," said John, "Won't you tell us about it?"

"I can only give you a rough idea about it now because I must be going. However it is based on the theory that education must be a development of the best inherent qualities of the individual and a suppression of the basest, and that this process must be largely the result of his own efforts under skilled guidance. It assumes that knowledge that has no application to life is of little use to the child; because life is the big thing, and knowledge that has no bearing on life's problems will not be remembered. Therefore to make any knowledge of value it must be the result of an experience in the life of the child. To teach in this way means that an incentive or motive should be supplied in order to make the child anx-

ious to work out his experiment and obtain the experience. It presupposes that the endproduct of education is to develop men and women of character, men and women who have learned to think, who know what they know, who are good citizens and believe in exercising the prerogatives of good citizens. . . . ."

Just then the bell rang and Miss Peterson was whisked away by her cousin. As she shook hands at the door she said to Mrs. Smith, "If you really care to hear about my solution come to the school on Wednesday at three o'clock. A visitor is going to give a talk which I am sure will give you a far better idea of the way I hope to work out the problem than I possibly could."

"Say, isn't that teacher a live one?" observed John, flicking the ashes from the end of his cigar. "She is the brightest thing in the teaching line I have ever met,—excepting yourself," he added hurriedly, seeing his wife reaching for a cushion to hurl at him.

"That after-thought saved your life,"

said Mrs. Smith. "I can clearly see that Miss Peterson is going to reform this school section."

"It's a dead sure thing," said John, "they can't stop her."

# Chapter IX

N the following day Miss Peterson gave the class the following sum in arithmetic:—

"If a boy gains one eighth of an ounce in nine days, how much will he gain in three and one half years?"

John Smith, who had been more or less unconsciously absorbing a good deal of his parents' discussions on health topics, flatly objected.

"Please, Miss Peterson," he protested, "it depends on his health and how much food he eats."

"And what age he is and what kind of food he eats," added his sister Margaret eagerly.

The other members of the class looked dumbfounded at these interruptions, but Miss Peterson was delighted. She had hoped that something might develop out of

her question and now she had the opportunity for which she had been asking.

"John and Margaret are quite right in objecting to this question," she said. "The gain made by the boy would depend on the amount and kind of food he ate, his age and his general health. It would be very difficult indeed, even for a skilled doctor to estimate how much a boy or girl should gain, even under the best conditions, without referring to carefully prepared tables in books. Perhaps you would like to know more about this?" she questioned.

"Yes, please teacher," chorused the class. "Well," continued Miss Peterson, "You have all seen a tiny baby grow bigger and bigger. At first it gains perhaps six ounces every week; then four ounces every week. When it is a year old it will be gaining two ounces a week. As the boy,—we will call it a boy,—grows older his increase in weight will vary according to his age and, of course, according to his general family type. Naturally a boy whose parents are big and heavy will tend to be heavier than

a boy whose parents are small in build. What is more remarkable is that at certain ages, notably between the ages of 11 and 15 or 16 the girls grow faster and bigger than the boys of the same age, though the boys soon catch up after that time.

"Now if the boy becomes sick for any length of time, or if he happens to be so poor that his parents cannot get the proper kinds of food or enough food to supply the needs of his growing body, or if his parents do not see that he is properly fed, he will not grow so fast, or so big, or so heavy as he would if he were in good health and properly looked after.

"For instance if his diet lacks milk and certain fruits and vegetables when he is a little boy he will probably develop rickets, a disease where the bones are deformed and proper development does not occur.

"Every growing boy and girl, for these reasons, should get plenty of variety in food and this should always include milk, some green vegetable and some fruit. The apple is probably the best fruit of all and, for-

tunately, nearly every Canadian can obtain plenty of these. Everybody who lives on a farm can obtain fresh milk, and this should always come from thoroughly clean cows, handled by milkers who wash their hands and utensils, because milk is so easily contaminated and spoiled for food.

"Then on the farms in winter we nearly always have carrots, which are very good in helping the growth of boys and girls; turnips; parsnips; potatoes, which are best baked; cabbages and sometimes celery and other vegetables. Of course in spring, summer and autumn we have the daintier vegetables such as lettuce, radishes, and spinach, which do not keep so long or so fresh, as well as Brussels-sprouts, cauliflower, tomatoes, peas, Swiss chard and corn. I almost forgot my favorite vegetable of all, green string beans.

"Green leafy vegetables are particularly good for children because they contain traces of substances called vitamins which are necessary to make boys and girls grow. Canned tomatoes contain lots of one kind

of vitamin which is often used instead of orange juice for babies; but you must remember that if you cook tomatoes with soda this vitamin is destroyed.

"So you see that if you wish to become vigorous, strong, healthy boys and girls you should eat plenty of vegetables, fruit and enough of the various staple foods like bread, meat, eggs, cereals and milk.

"Growing boys and girls usually do not require meat or eggs in any form more than once a day. Nearly everybody eats bread and butter, and some doctors recommend that only whole wheat bread should be used. However if you get whole cereals in the form of biscuits, or mush, or porridge made from oats or wheat or other cereals, you will get along all right. The whole cereal products contain certain vitamins, and, like vegetables, they give that bulk to our food which is necessary to maintain good health.

"Fresh, clean milk is the best of all foods, and a glass of it will go a long way to correct other deficiencies in diet. Even whole milk powder has been shown to be just as nutritious in every way as fresh milk itself. This is a splendid thing for people who live away out in the backwoods or mountains where fresh milk is not to be had. Not long ago I heard of one town of 7,000 inhabitants in Canada which uses only dry milk powder and seems to get along very well upon it.

"Now," continued Miss Peterson, "The practical point to know is are we all as big and as heavy as we should be?"

There was silence in the class. Miss Peterson allowed plenty of time for this idea to sink into the children's minds. Then Margaret Smith ventured, "Couldn't we weigh ourselves and find out from the tables you spoke about whether we are as big and as heavy for our ages as we should be?"

"That would be a splendid idea," said Miss Peterson approvingly, "Wouldn't it, scholars?"

"Yes, teacher," they answered enthusiastically.

"Have you all weighing scales at home?" the teacher asked.

About half of the children replied that they had, and these hastily offered to weigh those of their neighbors who were without scales. So it was agreed that on Tuesday afternoon Miss Peterson would bring her tables of heights and weights, and that each pupil should record and bring to school his or her height, age and weight without boots, so that they could compare and find out whether they were over or under weight. School was dismissed in a buzz of discussion and Miss Peterson, as she walked briskly homeward over the crisp winter snow, with the clean, keen wind blowing in her face felt happy. She knew that her plan was working, that she had started something worth while, and she was certain that it would bring great results in the end.

Tuesday was an uneasy day in class. There was a great deal of whispering behind closed palms, and confidential comparisons of weights, heights and ages. Not having any standards of comparison the

children were not able to get anywhere. Miss Peterson made no serious attempt to check the fermentation process which she had started in the school. Some of the class were confident that they would be found up to the standard; others had distinct forebodings that they would not be.

At half past two Miss Peterson unrolled her chart of weights and heights and hung it on the wall. All the boys and girls had written down on paper their own correct heights, ages and weights and the teacher began by taking the first girl in the front row. This girl, Josephine Johnson, was ten years old; she was 55 inches high and weighed 73 pounds.

Miss Peterson selected the ten year old column for girls, ran her finger down it until it was opposite Josephine's height. Where the two columns intersected the weight indicated was 73 lbs. which was her actual weight. This proved to the pupils that the chart must be pretty good to come out exactly right like that, and they were prepared to stand by it when the third girl

was found to be five pounds under weight. They were now thoroughly interested and Tom Gray was anxious to bet Jimmy Macallister, who had grown very rapidly, that he would be at least ten pounds under weight. Jimmy actually proved to be only eight pounds under weight, rather to Tom's discomfiture.

By a quarter after three all the pupils had been checked up and seven out of the thirty-five were found to be below the standard.

Miss Peterson explained that this did not necessarily mean anything, nor did the fact that some of the members of the class were of normal weight, judging from their height and age mean anything. She was careful to assure the children that at their age sickness and lack of health were not their fault but the fault of circumstances or possibly of neglect. "You could hardly expect a boy with a lot of bad teeth to chew his food properly, and you might expect him to have indigestion because he could not; it would be the parents' fault not the

boys if his teeth were not fixed wouldn't it?" she said.

The class was not so sure about that. Some of them were inclined to think that if a boy knew he had bad teeth he could make a big fuss until his parents had had them fixed.

Then Miss Peterson told them all about medical inspection of school children and how it had come about. "At first it was begun for the purpose of trying to prevent diseases such as scarlet fever and diphtheria from spreading in the schools, but that was only part of the problem. For the doctors began to find that children with enlarged tonsils were liable to get heart disease. They discovered that children with bad teeth often suffered from indigestion and were badly nourished. They found that enlarged adenoids not only made breathing difficult but actually resulted in changes in the bones of the face and even caused round shoulders.

"This made the doctors start off on a new line, and now they examine boys and girls to see if they are suffering from any of these

physical defects. Of course any boy or girl with diseased tonsils, adenoids or teeth wants to get rid of them, and not develop heart trouble or round shoulders or an adenoid look. Every boy and girl wants to be big and healthy and strong so as to get the most out of life in play and work. Medical inspection is a great thing," said Miss Peterson enthusiastically. "I remember one girl named Jessie Cooper. She was a pale, delicate, little girl, always suffering from a cold or something of that sort. The school doctor found that she had two ulcerated teeth and a bad tonsil. These were removed and soon Jessie was putting on weight and getting a fine colour in her cheeks that was wonderful to see. I could tell you of several other cases if I had the time, but it is half past three. But from what I have said you can see that medical inspection of school children is a splendid thing for boys and girls, because when their physical defects are discovered, they can insist on having them corrected. After that it is only a ques-

tion of practicing good health habits to keep well and strong.

"To-morrow I want you to be on your good behaviour because we are going to have an interesting visitor. She is going to tell you a story, quite a long story too, but I am sure you will enjoy it. There will be nothing more to-day; the class is dismissed."

On the following afternoon at 2.30 the expected visitor appeared and immediately found favor in the eyes of the boys and girls, who were irresistibly attracted to the lady. Miss Peterson lost no time in introducing her as Miss Sandford, an officer and a nurse who had served for four years in the hospitals in France during the great war and had been decorated with the Royal Red Cross from the hands of His Majesty, the King of England.

Miss Sandford immediately took on an added interest to the children. This lady had been a soldier on the field of battle, nursing wounded and stricken soldiers; she had seen war; she must be a hero to have been decorated by the King. The nurse

realized that her audience was with her to a man.

"In the spring of the year 1915," she began, "in the month of April another nurse and I were walking along a road near our Clearing Hospital, which was situated about 8 miles from the front line trenches. It was a beautiful spring afternoon, and we found some violets and several other species of spring flowers by the roadside ditches, which made us feel homesick for Canada.

"At a little Flemish farm house we stopped to talk to the children playing near the front gate. It was a busy road. Soldiers passed by on foot, on wagon and in motor cars, carrying provisions to the men in the trenches and messages from one part of the line to another. It was much too busy and dangerous a road for the children to be allowed to play on. A great gun with a barrel at least fifteen feet long, mounted on its huge carriage, rested on the opposite side of the road, covered with tarpaulins. At night the tractors would haul it to its position under cover of darkness when aeroplane ob-

servers could not see it. The afternoon was particularly quiet: few guns were going off in the line and there were not many wounded in the hospital. It was the calm before the storm. We were returning about five o'clock when a terrific hombardment suddenly began along the front near Ypres. We began to hurry along faster towards home, for we knew from experience that such a bombardment meant that a large number of wounded would soon be coming into the hospital. As we passed through the town of Poperinghe a great shell exploded in the block in front of us and blew a house all to pieces. When we got up to it we saw the neighbors trying to extricate a girl about 12 years old and an old lady. Both had been killed

"The bombardment increased in intensity as the evening passed. A message had come down for three nurses to go up to the Field Ambulance several miles closer to the front, where the wounded soldiers were taken after their wounds had been dressed at the advanced Dressing Station. I was chosen

one of the three. The chauffeur who drove us stated that the Germans had discharged poison gas clouds on the Allied line, that the coloured French colonial troops had given way and that the Canadians were now holding that part of the line practically alone. You can imagine how proud we were to be Canadians when we heard that.

"Before we reached the Field Ambulance darkness had nearly fallen, and the straggling natives whom we had met driving away from the front suddenly increased to a great mob of people crowding the roadway and making it almost impossible for us to proceed. There were people with horses and wagons full of household goods, often with people on top of them; donkey carts and dog carts, some with dogs hitched to them and others pulled by hand. There were cattle and sheep and pigs; old men and women; babies in arms and babies just able to toddle in this strange procession all coming from the city of Ypres. When we had to stop, as we frequently had, we asked the people what it all meant.

"The town is being blown to pieces," one said, "and we have just escaped with our lives."

"The city is on fire," said another, "My house was burning when I left."

"The front line has given away," a third assured us; "the Germans are coming through; they used poison gas."

"Some of them wept silently; others looked angry and muttered curses on the enemy who had used such foul methods. It was all very pathetic and very dreadful. At one point as we passed we could see a Canadian regiment drawn up on the roadside ready to march forward to reinforce the line. Further along we met the first motor ambulance carrying gassed and wounded soldiers down to our clearing station.

"It was now almost dark with the moon sometimes peeping from behind the clouds. The road had become more and more crowded and it became increasingly difficult for the military police to keep a passage open for military automobiles and wagons loaded with munitions and supplies.

At last we came to the Field Ambulance in Vlamertinghe and turned into the court yard where we were met by an officer and taken into the building. The sight we saw there I shall never forget. In long rows on the floor, lying on blankets and mattresses were hundreds of our Canadian boys struggling for breath. They had been poisoned by chlorine gas, of which the enemy had poured millions of cubic yards on our defenceless and unprepared soldiers.

"We immediately set to work in an attempt to make our poor soldiers more comfortable, but it was an impossible task in most of the badly gassed cases. Many of them died that night; some lingered on, and those that were only slightly gassed recovered.

"It was in this Field Ambulance that we saw the value of the organization that was working hard back here in Canada to make our wounded soldiers' lives easier. You all know about the Red Cross Society which everybody in Canada was supporting during the war. Scores of thousands of women

were knitting socks and making other articles of clothing for our men in the field. Scores of thousands of men and women were giving liberally of their money and time to buy comforts for our soldiers in the field and in hospital. The army itself, of course, could only supply the bare necessities of equipment, clothing and food for our soldiers. Extra comforts and even necessities to make the soldiers' lives bearable had to be supplied by volunteers through the Red Cross Society. It supplied soap, towels, socks, shirts, gramophones and pillow cases for hospital and other things too numerous to mention.

"Even the boys and girls in many of the schools in Canada earned and collected money for the Red Cross, and out of their efforts developed a new organization called the Junior Red Cross which I want to tell you about. But first I should tell you how the Red Cross Society originated in the first place. It was like this. The day after the battle of Solferino in Italy, a Swiss gentleman walking over the field of battle was

greatly moved by the terrible scenes of suffering which met his eyes. The wounded and dying lay about on every side, and there was nobody to care whether they lived or died; nobody even to give them a glass of water to relieve their pangs of thirst.

"M. Dunant was so impressed by the suffering that he had witnessed that he wrote a book about it, and then organized the Red Cross Society whose function was to look after the sick and suffering in war. The Red Cross was to be neutral, and to be protected by all combatants. All doctors, nurses and hospitals are now supposed to be protected in the war area by the Red Cross flag, and in fact it usually is effective.

"After the last war men said to themselves. 'The Red Cross spirit in war is a wonderful thing, because it inspires men and women of every country and every religion to do their utmost for all the sick and the suffering. Why not carry this spirit on in peace time with the same objects, namely the relief of unnecessary sickness and suffering?' So they reorganized the Red Cross

for peace work, and as perhaps the most important part of it they have organized the boys and girls as Red Cross Juniors. So widespread has this organization become that now there are 52 nations, including practically every civilized nation, engaged in carrying on the peace work of the Red Cross.

"These countries help each other in times of great national calamities like the recent Japanese earthquake. The Red Cross assists places where great epidemics occur such as in Cochrane, Ontario, in 1923, when the town was devastated with typhoid fever; or where there has been a great forest fire as in Ontario in 1922. In Canada the Red Cross is busy building little hospitals to look after the sick on our frontiers where there are now no hospitals or doctors. Last year the Red Cross gave a course of lectures in Home Nursing to more than three thousand women in Canada. Besides these things they are carrying on dental clinics, soldiers' workshops and many other things which are helping to carry out the ideals of the Red

Cross to make people happier and healthier. "In 27 countries of the world the boys and girls are banded together as Red Cross Juniors, nearly 8 millions of them. In Canada we have about 100,000 boys and girls engaged in this work; and our Canadian Juniors are said to be as progressive as any Juniors in the world. They are organized in the schools of Canada with the object of helping less fortunate children, and of becoming good, healthy, happy and useful citizens. Any school can form a Junior Red Cross Society, but Juniors must conform to certain rules. If you were to form a Junior Red Cross Society in this school you would have to select one of your own boys or girls as president, another as secretary, another as treasurer and others on the various committees. The teacher would not be allowed to take any of the official positions; all she can do is to act as adviser.

"You would have regular meetings at which reports of the various committees would be received. Your committee on the fund for crippled children would give

an account of its activities. The committee on Sanitation, Hygiene and the hot school lunch, others would give an account of what progress they had made. At your meetings you would have songs, recitations, readings of papers, debates on health topics, and many other things according to what you yourselves should decide. Nobody can interfere with you if you hold your meetings after school hours, or if you obtain permission to hold them during school hours.

"In many cases where the school classes have taken up the Junior Red Cross, the whole atmosphere of the class room has changed, sometimes almost beyond recognition. There is more fun, better teaching, greater interest in everybody else and in everything; in fact the school has become a pleasant place where boys and girls want to go because it is a pleasant place to be. Best of all Red Cross Juniors learn to be of greater value in the world. They are better students because they are strong and healthy. They have more fun because they can play better and because they have greater inter-

est in the other fellow. They are happier because they help one another and the less fortunate ones.

"There was a little girl named Rosie Gagnon living in Hudson Bay Junction who had had a serious accident when eight years of age which left her a hopeless cripple. She had to lie in an almost rigid position on her back and could not even feed herself. Her parents could not afford to pay the railway fare to the nearest hospital to say nothing of the hospital and doctors' bills so Rosie was left for three years without treatment.

"When she was eleven years old the Junior Red Cross committee of Saskatchewan heard of her and arrangements were made to bring her to the general hospital in Regina. She was there for a year, and during that time underwent a series of operations, with the result that at the end of that time she could do anything that any normal child could do, except walk. She could sit up quite erect in a wheeled chair and could move it along with ease. Not only could she take care of herself, but she also learned

to make her own clothing. While she was in the hospital Normal students taught her, so that when she left, she was as well advanced as the ordinary child of her age. She came in a state of living death, and left, thanks to the Red Cross Juniors, a healthy, happy, active little girl."

The nurse finished her story and looked at her watch,—"Dear me," she exclaimed, "I have talked away beyond my time. If I do not go at once I will miss my train. Wouldn't that be dreadful?" And so, shaking hands with the teacher and waving the class good-bye the nurse with the inspiring face and the attractive manner left the school, but behind her the idea which Miss Peterson had wanted an outsider to leave.

The children did not talk very much as they were leaving that night but there was a thoughtful look on the faces of most of them as they went over in their own minds the story of Rosie and the Red Cross. As she was stepping from the room Miss Peterson's hand was grasped warmly by Mrs. Smith. "You have done it," she exclaimed

delightedly; "Just watch the youngsters demand that the Junior Red Cross be started in the school."

"If they do not I shall be disappointed," replied Miss Peterson. "I know something of children and I think it will work out alright; Good-night," and the two went their several ways through the sharp wintry evening.

# Chapter X

OTHING was said about the talk of the nurse on the following morning, but at the noon hour, which many of the children spent at the school, there was a very lively discussion of the whole matter. It ended by their deciding to call a meeting of the whole class that afternoon after school hours to see whether they would form a Junior Red Cross organization or not. The nurse had left some pamphlets on the subject, including several copies of "The Red Cross Iunior" which greatly interested them. The more they thought about the matter and talked about it the more they liked the idea of forming such a society. One boy strongly endorsed the idea of holding meetings and conducting them properly; another approved of the idea of preparing papers: several of the girls enthused over the idea of getting up plays and a concert, and most

of them were strongly in favor of the Junior Crippled Children's fund.

"I'm going to earn fifty cents and take that paper," one boy assured another; "It has some stories about birds and things like that."

"There are some lovely plays about fairies and such things," said a girl.

"Here's a peach of a play about pirates," added another boy who was deeply immersed in a copy of the paper; "it's great."

The outcome was that at a meeting of the class held after school, to which Miss Peterson was invited to stay and advise them, it was unanimously decided to form a branch of the Junior Red Cross Society and the officers were elected then and there. John Smith was elected chairman of the committee on Hygiene and Sanitation. His sister Margaret was made vice-president of the branch. Miss Peterson suggested that she should be made adviser when they asked her how she could be included.

It was decided that the first meeting would be held on the following Friday at

3.30 o'clock; and the programme arranged by the committee with the assistance and advice of the teacher, included the reading of the minutes, reports of committees, a song by one of the girls, a paper on the nature of foods and another on "Our Bird Friends." The first reading of a play by a cast to be selected by the teacher was also to be given.

The following week was one of the most interesting that Miss Peterson had ever experienced. On Saturday afternoon the committee on Hygiene and Sanitation met at the school, having previously secured the key, and with the help of some volunteers, pressed into the service, gave the old school the most thorough cleaning it had ever received. The walls were brushed down, the windows polished and the floors scrubbed. The stove was also blacked, the wood box cleaned of its accumulations and the debris burned. On Monday a thermometer appeared on the wall, and every half hour or so it was gravely consulted by a member of the committee on sanitation: and if it was too hot or too cold the window

was raised or lowered accordingly. Great attention was given to keeping the stove at an even heat, but Miss Peterson managed to obtain the beneficial effects of variations in temperature by having the pupils take singing and marching lessons with the windows open.

The same committee announced through a notice on the bulletin board, that on and after Thursday there would be an examination of the pupils to see whether they had washed their hands and faces. In spite of the warning two old offenders and one boy who had been too late to wash were detected. It seemed rather rough to be singled out in class, but after all they had been warned and the others felt that it was perfectly fair. But the lesson was well learned and nobody in that class was ever caught in that way again. Attention was also directed to brushing the hair, keeping boots clean, and clothes clean and neat in appearance. In a week the class hardly recognized itself, it was so smart.

The members of the programme com-

mittee worked hard, and were ready on Friday when the President rose, and gravely calling the meeting to order asked the Secretary to read the minutes of the organization meeting. This having been done, the President asked if they were approved and suggested a motion that they be adopted. The proceedings were carried on throughout with meticulous attention to detail and form. Even Miss Peterson, knowing children as she did, was astounded at the way they had managed to grasp, not only the essentials but the details of conducting a meeting, from a pamphlet left by the nurse.

The chairman of the committee on Hygiene and Sanitation reported real progress. The committee on the Hot School Lunch reported strongly in favor of the proposition, but regretted that lack of funds to buy the necessary equipment did not allow of this being carried out at present. It made the suggestion that a concert to raise funds for that purpose be held in the near future. The treasurer of the Finance Committee said that his committee had studied this, and

also "The Crippled Children's Fund." as well as the necessity of subscribing to "The Red Cross Junior." His committee was decidedly of the opinion that there should be a Crippled Children's Fund for which the members of the class should work all the time by saving and by earning money. It was also of the opinion that the class should purchase at least two copies of "The Red Cross Junior" for the class as a whole; but that every member who could possibly do so should buy a copy for himself each month, and that to facilitate this there should be a "Circulation Manager" to look after sales, order the magazines, collect and send in the money to headquarters. It was also agreed that as everybody in the class could not earn 25 cents at this time of the year, all should become members and the fees earned by some class enterprise such as a concert in which all could take some part.

After some discussion and questioning, during which Miss Peterson was referred to, the reports were all adopted and the first

reading of the play given by a cast which the teacher had been asked to select.

The paper on "Our Bird Friends" was very interesting and gave a great deal of information to show that if it were not for the birds our farms would be overrun with insects and our crops destroyed, and that for this reason, if for no other, birds were our best friends and should be encouraged by building suitable bird houses, by feeding and protecting them.

The paper on foods did not prove to be quite so happy, and it was clearly evident that the author had found the amount of material too much to assimilate properly. However, as the result of a question, Miss Peterson came to the rescue and clearly and briefly showed that there were three kinds of foods necessary for life, and that if we ate some of the cereal products, including whole cereals; some vegetables including leafy vegetables; milk and its products, and some fruit, such as apples every day, with meat or eggs once a day we would get along very well. The main thing she showed was

that these various food materials should be in proper proportion. Incidentally she approved of the hot school lunch as a necessity for growing boys and girls.

The meeting then adjourned after sing-

ing "God Save the King."

The repercussion of that initial meeting of the Red Cross Juniors was felt far and wide in the district. The children of the school spoke of nothing else over the weekend. A great thing had come into their lives. They had an association of their own which they ran like grown people. They had problems to deal with; money to raise; obligations to themselves and their community. Many mothers were taken into confidence about the hot school lunch idea; and the fathers were greatly interested in the facts about birds, such as the one that a young robin will eat two-thirds of his own weight of grubs and insects every day.

The result was that the mothers decided to form a club for the purpose of providing a hot school lunch for their school children, and with that end in view formed a "Home

and School Club." In course of time they held a "Basket Social" from which they realized the sum of \$89.70. With this they bought a three burner Perfection Oil Stove, a dish pan, two saucepans, a wash basin, three dozen cups and saucers, some large spoons, half a dozen tea towels and some wood to make cabinets for the stove and dishes. A stock of cocoa and canned tomatoes, peas and corn to make soup was also laid in, and milk was purchased from a nearby farm. White paper crepe napkins were also provided.

Two of the older girls were appointed each week to prepare the soup or cocoa and wash the dishes. It worked out splendidly, and soon the children in that school were not only getting something hot for lunch, but in addition a much better balanced lunch because the parents had become intelligently interested in the subject. At the lunch hour, particularly in winter when it was too severe to play outside, little papers on food subjects were given and discussions were held which materially widened the

horizon of the pupils in the subjects of health and geography.

In the course of a few weeks the pupils in Miss Peterson's school became so alive to the importance of certain things that they began to agitate for medical inspection. They began to think it was not enough to try to improve their own health by good food and habits, if they were suffering from physical defects. This was soon arranged, and one day two physicians and a nurse arrived from the city. One was a surgeon and a great authority on eye, ear, nose and throat. The children were given a thorough examination and eight cases of diseased tonsils and three of adenoids were discovered and recommended for operation. Several other physical defects, such as spinal curvature were found as well as one bad heart. There were also six cases of defective vision for which proper glasses were prescribed.

A month later, when those operated on had fully recovered, a dentist came to the school, extracted a number of teeth, filled

a large number more and cleaned the teeth of all. The class now felt that as a unit it had been fully repaired, and figuratively felt its biceps and prepared to make further advances. The class had changed almost beyond recognition. The children were now wide-awake, keen, alert, anxious to learn, courteous, interested in each other, and in a quite new way proud of their group. Instead of having uninteresting facts crammed into them by an uninteresting person they were now eagerly assimilating knowledge, largely through their own efforts. They were learning, by doing, not only in health but in every other matter. Lessons were now adventures. The pupils never knew when arithmetic might not suddenly develop into a problem as to the amount of cocoa consumed in a year by eight million Juniors, if each took a tablespoonful five times a week, each tablespoonful weighing 3% of an ounce. As likely as not a geography lesson would develop into a description of a country inhabited by the very children they had been reading about

in their magazine the week before. Compositions were liable to be set on subjects like "The Animals on Our Farm," or "What our Juniors are doing in Canada," or some such homely title.

But to the occasional visitor like Mrs. Smith the transformation was even more remarkable. On the spring afternoon that she visited the school she felt the difference as soon as she had entered the room. In the first place the children stood up when she came in, and then when they were told to go on with their work paid no more attention to her, showing that they had learned manners. They were courteous to their teacher and to one another. They spoke better English and with greater sureness. They were clean and neat in appearance. The school itself was immaculate; the air was fresh; there were some health posters on the wall.

It did not take her long to discover that discipline was perfect because the children had learned to govern themselves. She knew from experience with her own children how they had become interested in

the crippled children, and had already raised nearly \$20 towards a fund that had been responsible for treating over 3,000 cases of crippled children in Canada. Like other parents she and her husband were delighted at the interest the boys and girls were taking in public meetings and in how they were being conducted; at their interest in putting on plays and in giving concerts by which they were learning to be at ease on the public platform and in speaking.

Lessons were no longer a burden but intensely interesting because they now featured the human element. And all the while the Smiths could see the characters of their boy and girl being moulded, manners improved, and vigor and initiative increased. The experience of the Smiths with their children was repeated in many homes, save that the effects on the children and upon their families were even more pronounced, because they had not the advantages of the Smiths to start with. One of the greatest changes brought about in the

homes through the children was in the diet of the country people, which became in many instances a much better balanced one. As in the case of the Smith family, many years before, whole grain products began to appear to give variety to the diet in the country home. Apples, the best of all winter fruits and a veritable God-send to Canada in winter, were served up in many new ways. Carrot puddings made their appearance and were pronounced excellent. It was wonderful what could be done with staple products and common vegetables, when the principles underlying a balanced diet, and cooking, were understood.

The school inspector of the district heard of the experiment, came, saw and was conquered. He got Miss Peterson to give a paper before the teachers' association at two district teachers' meetings. At the first some may have been converted, but it is exceedingly difficult to estimate the effect of a paper. At the second meeting he was wiser, and at the close of the discussion, slips of paper were handed around upon which

teachers who wished to develop the Junior Red Cross in their schools were asked to sign their names. In this way 167 names were secured and to these, instructions were sent subsequently telling how Junior classes should be organized. By striking in this way, when the interest of the teacher was active, a very large proportion of the teachers actually organized Junior Red Cross groups; whereas if their interest had been allowed to wane only a small number would have started it.

The Inspector became a "booster" and did everything in his power to interest teachers in the new venture. He quickly found that the first great appeal which the Junior Red Cross made to the average teacher was that it made discipline easier. Anything that would accomplish that, was usually considered by teachers to be worthy of further investigation, and so teacher after teacher was induced to give the Junior Red Cross a trial.

And there we must leave it for the present spreading, spreading, until

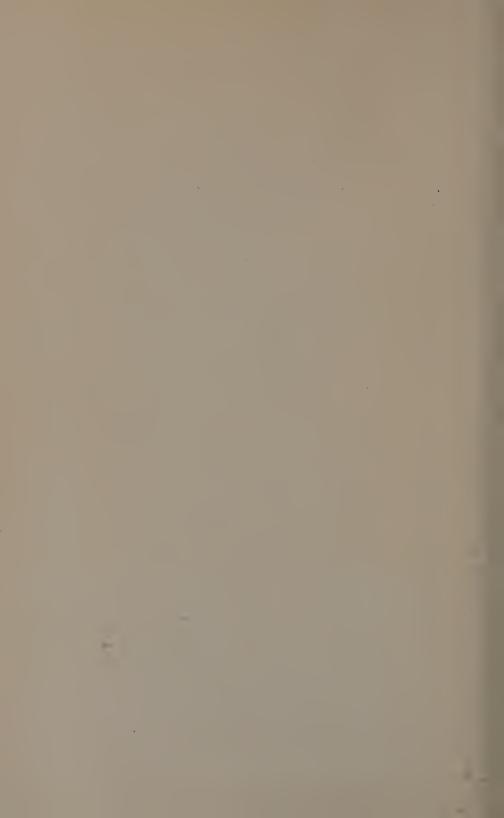
finally,—it is hoped,—it will completely cover Canada from the Atlantic to the Pacific; from the international border to the Arctic ocean, until every class room in the Dominion will have Junior Red Cross organized to make healthier, happier and finer boys and girls.

Only by working through the children in our schools may we expect to see these high ideals of good citizenship, health and humanity become nation wide, fusing our people into a homogeneous whole, with high national character; for such common ideals and aspirations are the real melting pot which will eventually make us worth while individually, and collectively, as a nation.

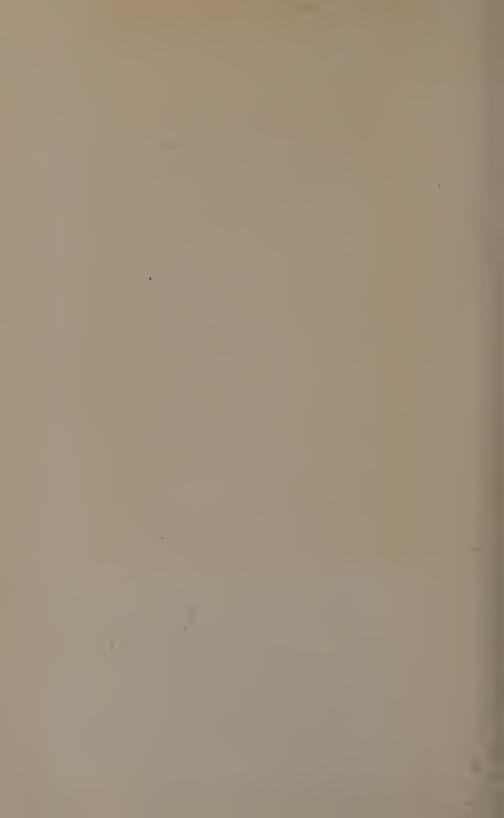
When the end of their year came the Smiths had decided to live in the country for a few years longer. So John bought the farm and persuaded some of his city friends to come out and try the same experiment that they had found so interesting and so satisfactory. Another boy had come to enlarge the Smith household and was greeted

with great satisfaction by both the parents and the children. This was as it should be, for as John said to his wife: "We have now learned how to bring up children properly and we had better keep in practice, using the knowledge that has taken us such a long time to gain. Then we shall be doing our share toward making this a better and a greater country, by helping to people it with 'Smiths of a better quality.'"















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Nasmith, George Gallie
Smiths of a better quality

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